Claims:

1. A flashlight comprising:

a lamp;

a power storage element;

a switch;

an electronic controller;

the controller having a switch input connected to the switch;

the controller being operable in response to the input to deliver power from the power storage element to the lamp; and

the flashlight having an elongated housing having the lamp at a first end and the switch at an opposed second end, and including at least two independent electrical paths between the first and second ends.

2. The flashlight of claim 1 wherein the switch is operably connected directly to the switch input.

3. The flashlight of claim 1 wherein the controller, lamp, and power storage element are connected to each other via a power circuit bypassing the switch, such that current for illuminating the lamp does not pass through the switch.

4. The flashlight of claim 1 wherein the switch is operable within a range of conditions and is operable to transmit an electrical state corresponding to a condition to the controller.

5. The flashlight of claim 1 wherein the switch has a plurality of different electrical states in addition to an off state, and wherein the electrical state is based on a degree of externally applied force.

6. The flashlight of claim 5 wherein the switch includes a plurality of separate contact elements each connected to a respective electrical component, and all operable to contact a common contact sequentially in response to movement of a switch actuator, such that the number of

separate contacts contacting the common contact is based on the degree of applied external force.

7. The flashlight of claim 6 wherein the switch includes at least a resistor, and the electrical states include a plurality of different resistance values.

8. A flashlight comprising:

an electronic controller;

a lamp connected to the controller;

a power storage element connected to the controller;

a switch connected to the controller;

the switch being operable within a range of conditions and is operable to transmit an electrical state corresponding to a condition to the controller; and

the switch having a plurality of different electrical states in addition to an off state, and wherein the electrical state is based on a degree of externally applied force.

9. The flashlight of claim 8 wherein the switch includes a plurality of separate contact elements each connected to a respective electrical component, and all operable to contact a common contact sequentially in response to movement of a switch actuator, such that the number of separate contacts contacting the common contact is based on the degree of applied external force.

10. The flashlight of claim 9 wherein the switch includes a resistor network, and the electrical states include a plurality of different resistance values.

11. A flashlight comprising:

a lamp;

a power storage element;

a switch;

an electronic controller connected to each of the power storage element, the lamp, and the switch;

the controller operable to provide momentary illumination of the lamp during an application of a first degree of force, and to cease illumination of the lamp in response to cessation of the force; and

the controller operable to provide sustained illumination of the lamp in response to application of a greater second degree of force, and to maintain illumination of the lamp in response to cessation of the force.

12. The flashlight of claim 11 wherein the controller is operable while providing sustained illumination after cessation of the force to cease illumination in response to a second application of force.

13. The flashlight of claim 11 wherein the switch includes a plurality of contacts, at least one of which having an associated resistor connected to present a net resistance to the controller based on the degree of force applied to the switch.

14. A flashlight comprising:

a lamp with a variable light output level up to a maximum output level;

a switch operable through a range of conditions ranging between a released position and a fully actuated condition;

a power storage element;

a dimmer facility operable to select a dimmed output level below the maximum output level;

an electronic controller operably connected to each of the lamp, the switch, the power storage element, and the dimmer facility;

the controller operable to provide illumination of the lamp at the dimmed output level in response to an application of a first degree of force;

the controller operable to provide illumination of the lamp at the maximum output level in response to application of a greater second degree of force.

15. The flashlight of claim 14 including in response to application of the first degree of force for less than a selected duration, sustaining illumination of the lamp at the dimmed output level after cessation of the force.

16. The flashlight of claim 14 including in response to application of the second degree of force for less than a selected duration, sustaining illumination of the lamp at the dimmed output level after cessation of the force.

17. A method of operating a flashlight having a light source with variable light output up to a maximum output level, and a switch operable through a range of conditions ranging between a released position and a fully actuated condition, the method comprising:

establishing a dimmed level at an output less than the maximum level;

in response to actuating the switch to an intermediate condition between the released position and the fully actuated position, illuminating light source at the dimmed level; and

in response to actuating the switch to the fully actuated condition, illuminating the light source at the maximum level.